

UC 493

.A5

1914

Copy 1

U. S. Master copies.

SPECIFICATIONS FOR SHOES.

114, in lieu of specifications adopted May 7, 1913 (No. 1188), which are canceled.)

Patterns.—The shoes to be made on Government standard cut to conform to Government standard patterns.

Materials.—Vamps, quarters, tongues, stays, and side linings are subjected to different degrees of wear. These five parts, therefore, need not be of same substance of material, but each must be of first quality, for the class in which it is used, and equal in all respects to the standard sample. Sole leather is to be tanned from green salted hides, of good fiber and weight, free from impurity, excessive weighting or other matter not required in the preparation of leather of the first quality, free from any blemishes from curing that will affect the wearing qualities of the leather after tanning, and equal in all respects to the standard sample. No leather, the quality of which has been impaired by materials used or by the process of tanning, shall be used.

UPPER LEATHER.

NOTE.—*Bidders must state whether vegetable or chrome tan will be used for uppers and submit samples if required.*

Vamps and toe caps.—To be of plump russet-tanned full-grain calf, veal, or veal kips, not to exceed twenty-three (23) nor be less than twelve (12) square feet in size, of uniform thickness, quality, and color. No flanky or inferior leather to be used.

Quarters.—To be cut from same kind of leather as the vamps, but of substance suitable for quarters.

Outside backstays.—To be of same material and quality as vamps, and to be of proper substance and properly skived.

Inside backstays.—To be cut from chrome or vegetable tanned Russia calf or bleached calfskins, of proper substance and properly skived.

Tongues.—To be cut from the same kind of leather as the vamps, but of a substance suitable for tongues.

Side linings.—To be cut from same kind of leather as vamps, but of a substance suitable for side linings.

Heel pads.—Best bark-tanned russet sheepskins of good substance.

(N. B.—Quality for quarters, inside backstays, tongues, and side lining is fixed under “*Materials.*”)

BOTTOM STOCK.

NOTE.—*Bidders must submit samples of bottom stock if required. Bidders must state in their proposals whether they propose to use “Oak” or “Union” tanned leather for insoles, counters, rands, and welts, and whether “Oak,” “Union,” or “Hemlock” tanned leather for heel lifts.*

Outsoles.—To be of best quality, cut from bends, from green-salted hides, “Texas,” or equal of standard “Oak” tannage, soles

to be ten iron in substance. No soles with brands in fore part or shank to be used.

NOTE.—The iron herein referred to is one forty-eighth ($\frac{1}{48}$) of an inch.

Insoles.—To be of best quality and to be cut from “Oak” or “Union” tanned leather of standard tannage, with fiber strong, and of quality well adapted to purpose, avoiding soles so hard as to tear in sewing or soles so soft as to stretch in use. To be uncurried, scarfed, and not less than six iron in substance.

Counters.—To be of first quality, in one piece, and cut from “Oak” or “Union” leather of standard tannage, of firm, strong fiber, and not less than six iron in substance. No molded counters to be used.

Top pieces.—To be of best quality, cut from bends, from standard tannage of “Hemlock” leather, free from any blemish that will affect the wear. Top pieces to be ten iron in substance. No compressed top pieces will be accepted.

Heel lifts.—To be of grain whole lifts, cut from “Oak,” “Union,” or “Hemlock” sole leather, no lift to be less than five iron in substance.

Rands.—To be of “Oak” or “Union” tanned sole leather, of good fiber and proper thickness for curve of heel seat.

Welts.—Full grain “Oak” or “Union” tanned welting of first quality nine-sixteenths ($\frac{9}{16}$) of one (1) inch wide and one-eighth ($\frac{1}{8}$) of one (1) inch thick.

LININGS AND FINDINGS.

NOTE.—*Bidders must submit samples of linings and findings if required.*

Cotton drilling for linings.—To stand a strength test of not less than one hundred (100) pounds per inch in the warp and not less than ninety (90) pounds in the filling. Weight to be not less than eleven (11) ounces per yard, thirty-six (36) inches wide.

Laces.—Each pair of shoes to be supplied with a pair of brown cotton tubular laces, thirty-six (36) inches in length, with metal tips, and to stand a tensile strength of one hundred and twenty (120) pounds. Dye to be fast.

Silk thread.—To be letter “D” size of standard make, and to stand a strength test of twelve (12) pounds.

Linen thread.—To be best quality linen of following sizes: Three cord 60, nine cord, and ten cord.

White cotton tape.—One-half ($\frac{1}{2}$) inch wide, of good quality, with finished edges.

Pull straps.—Of strong three-fourths ($\frac{3}{4}$) inch brown tubular cotton webbing.

Eyelets.—To be of metal, with brown celluloid tops, having an opening not less than three-sixteenths ($\frac{3}{16}$) inch in diameter.

Shank pieces.—Leather board reinforced with steel. To be rights and lefts, corresponding with shape of inseam, and medium bend. Thickness of steel one thirty-second ($\frac{1}{32}$) of an inch; width of steel five-eighths ($\frac{5}{8}$) of an inch; length of steel, sizes 5 to 6½, three and

one-quarter ($3\frac{1}{4}$) inches; 7 to $8\frac{1}{2}$, three and one-half ($3\frac{1}{2}$) inches; 9 to $10\frac{1}{2}$, three and three-fourths ($3\frac{3}{4}$) inches; 11 to 12, four (4) inches.

Bottom filling.—Ground cork or leather, and rubber cement, or equal.

Nails.—To be of Swede iron No. 14, one and one-sixteenth ($1\frac{1}{16}$) inches long.

Steel wire for slugging heels.—To be letter "P" or No. 125, four-eighths ($\frac{4}{8}$) inch long.

Rubber cement.—To be used throughout and of the best quality.

All of the material to be of the best commercial quality as shown by the cut standard sample.

All shoes to be of first quality as shown by standard sample.

CUTTING AND MAKING.

Vamps.—The entire vamp to be cut in one piece, and in such a manner as to bring the seam perpendicular at the inner side of heel, joined by a welt stitched on the inner side and supported by tape stitched on each side with one row of silk. The vamps for sizes 5 and 6 will be of lighter substance, those for 7, 8, and 9 of medium substance, and those for 10, 11, and 12 of heavy substance. No flanky or inferior leather to be used. All vamps to be crimped. To be stitched to the quarters with four rows of silk. Vamp lining to be same as the quarter lining.

Toe caps.—To have one row of holes punched and to be stitched with four rows of silk by a lock-stitch machine. The cap, vamp, and lining to extend to the end of shoe, and all lasted in together.

Quarters.—To be regular seamed at the back one (1) inch from top, the remainder with butted seam stitched with zigzag machine and reinforced at top by stitching on each side of seam with one row of silk through lining and pull strap. To have a beading or fold at top three-sixteenths ($\frac{3}{16}$) inch deep when finished, stitched with one row of silk.

Outside backstays.—To cover back seam from bottom of quarters upward to within one-half ($\frac{1}{2}$) inch of top. To be one (1) inch wide at top of vamp, and shaped as shown in standard sample. To be stitched with two rows of silk through the quarters and inside backstays catching by same two rows of stitching the pull strap not less than one-half ($\frac{1}{2}$) inch from top.

Inside backstays.—To be one (1) inch wide at top and seven (7) inches wide at heel seat, to be stitched to cotton-drill lining with one row of linen conforming to prick holes in lining, and to be caught by four rows of vamp stitching and smoothly pulled in the lasting. At the top is securely fastened a pull strap, inserted with one end lapping the other one-half ($\frac{1}{2}$) inch to give skived effect.

Tongues.—To be one-half ($\frac{1}{2}$) bellows, properly crimped and to extend to edge of quarter and to act as eyelet stay. To be stitched to edge of quarter with one row of silk. To have two extra rows of silk about three-fourths ($\frac{3}{4}$) inch from edge through tongue, lining, and quarter. The tongue to be inserted between the vamp and lining, and stitched through with two rows of silk. To be attached to the quarter in such a manner as will bring the corner of tab to

prick mark on vamp without strain or crowding. The tongue to be so placed under vamp that the crotch shall be tight against water or gravel. Edges to be skived, if required.

Side linings.—To be neatly skived with about one-half ($\frac{1}{2}$) inch lap at counter, and to extend to and be sewed in at end of toe cap. Width as shown by standard sample. To be cemented to vamp.

Heel pads.—To be cut for size 8 shoe, three (3) inches long, and graded proportionately for other sizes. To be securely cemented in place.

Outsoles.—To be properly tempered and cemented, laid with a sole laying machine, and rounded with a rough rounding machine. Outsoles to be stitched by a lock-stitch machine with nine cord first quality linen thread, about eight stitches to the inch. Bottoms to be properly leveled.

Counters.—To be neatly skived at edges all around, following the best practice for the purpose. Counters to be inserted between vamp and lap of quarter, as shown in standard sample.

Heels.—To be one (1) inch over all and to be carefully built, well cemented, well compressed, filling the mould full and thoroughly dried before using. To be secured with nails three to the inch, with two nails additional at breast. Top pieces to be slugged with wire not less than seven slugs to the inch, one row around the heel and one-half row extra on the outer side of heel. Not less than five slugs at breast. The heels to be thoroughly trimmed, sanded, and burnished. Joints to be true and evened.

Rands.—To be in one piece, five-eighths ($\frac{5}{8}$) inch wide and caught by the heel nails.

Welts.—To be properly grooved, beveled, and sewed with a ten cord best quality linen thread, three and one-half ($3\frac{1}{2}$) stitches to the inch.

Bottom filling.—After shoes have been inseam-trimmed, and welts beat out, the bottom filler is to be carefully applied in such a manner that the filled bottoms shall present a uniform and smooth surface upon which to lay the outsole.

Shank pieces.—Cemented to insole. No tacks to be used.

Lasting.—The upper shall be pulled over at the toe and heel lasted across the ball and at the waist by hand, or in a manner equal to hand lasting. Bed machines then to be used to finish the lasting so as to carefully wipe or crimp the toe and heel into place.

Seat nails.—To extend around heel seat to ends of welt, and to be nailed with a loose nailing machine, three nails to the inch.

Edges.—The edges are to be trimmed square, except inside shank, which is to be rounded, set up twice with hot irons, made solid and smooth.

Quarter linings.—To lap the vamp lining, and to be stitched together with sixty, three-cord thread. Vamp lining to be crimped and cemented to the vamp, smooth and free from wrinkles under the toe cap. The quarter lining to be pricked and back stay stitched on in conformity to pricking.

Eyelets.—Shoes of size 5 to $8\frac{1}{2}$, inclusive, to have eight and sizes 9 to 12, inclusive, to have nine eyelets on each side.

Miscellaneous.—Shoes to remain at least four days on the lasts. Each pair to be properly treed. Bottoms of shoes to be cleaned without the use of acids or other chemicals. If cleaned with water the soles must not be dried quickly. Hot iron will not be used in polishing. Shoes must be of uniform color and each pair to be mated. Sizes and widths of shoes to be marked on bottom and lining. Each pair of shoes to be packed in pasteboard cartons. Name of contractor, date of contract, specification number, and depot to be stamped on lining of each shoe with indelible ink.

Sizes and measurements.—To run from 5 to 12 in one-half sizes, and A, B, C, D, E, and EE widths, measurements of shoes, when finished, based on 8-C, to be as follows:

	Last measurements.				Shoe measurements.											
	Heel.	Instep.	Waist.	Ball.	Length of—			Height of shoe.		Heel.				Width.		
					Toe cap.	Vamp.	Counter.	At back.	At side.	Length.	Width.	Across breast.	Height.	Sole at ball.	Shank.	
	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	
A	12 $\frac{1}{2}$	9	8 $\frac{9}{16}$	8 $\frac{3}{8}$	2 $\frac{1}{2}$	6	9 $\frac{1}{2}$	5 $\frac{1}{2}$	6	3	2 $\frac{9}{16}$	2 $\frac{7}{16}$	1	3 $\frac{1}{2}$	2 $\frac{2}{3}$	
B	12 $\frac{3}{4}$	9 $\frac{1}{4}$	8 $\frac{1}{2}$	8 $\frac{5}{8}$	2 $\frac{1}{2}$	6	9 $\frac{1}{2}$	5 $\frac{1}{2}$	6	3	2 $\frac{1}{2}$	2 $\frac{8}{16}$	1	4	2 $\frac{1}{2}$	
C	13	9 $\frac{1}{2}$	9 $\frac{1}{16}$	8 $\frac{7}{8}$	2 $\frac{1}{2}$	6	9 $\frac{1}{2}$	5 $\frac{1}{2}$	6	3	2 $\frac{1}{2}$	2 $\frac{9}{16}$	1	4 $\frac{1}{2}$	2 $\frac{4}{4}$	
D	13 $\frac{1}{4}$	9 $\frac{3}{4}$	9 $\frac{6}{16}$	9 $\frac{1}{8}$	2 $\frac{1}{2}$	6	9 $\frac{1}{2}$	5 $\frac{1}{2}$	6	3	2 $\frac{1}{2}$	2 $\frac{10}{16}$	1	4 $\frac{2}{2}$	2 $\frac{5}{4}$	
E	13 $\frac{1}{2}$	10	9 $\frac{9}{16}$	9 $\frac{3}{8}$	2 $\frac{1}{2}$	6	9 $\frac{1}{2}$	5 $\frac{1}{2}$	6	3	2 $\frac{1}{2}$	2 $\frac{11}{16}$	1	4 $\frac{3}{2}$	2 $\frac{6}{4}$	
EE	13 $\frac{3}{4}$	10 $\frac{1}{4}$	9 $\frac{13}{16}$	9 $\frac{5}{8}$	2 $\frac{1}{2}$	6	9 $\frac{1}{2}$	5 $\frac{1}{2}$	6	3	2 $\frac{1}{2}$	2 $\frac{12}{16}$	1	4 $\frac{4}{2}$	2 $\frac{7}{4}$	
Each size to differ....	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	0	$\frac{1}{2}$	$\frac{1}{2}$	
Permissible variation	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	

All points not covered by these specifications as to materials to be like and equal in all respects to the standard samples.

All points not covered by these specifications as to the completed shoe to be like and equal in all respects to the standard sample shoes adopted by the department from samples submitted by the respective bidders and so designated at the time award is made.

J. B. ALESHIRE,

Chief, Quartermaster Corps, United States Army.

WAR DEPARTMENT,

Office, Chief, Quartermaster Corps.

499994.

SHOE



LIBRARY OF CONGRESS



0 011 484 303 9

Phila